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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/705,316

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Ramnath N. Iyer

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EXAMINER

LANG, AMY T

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/705,316	IYER ET AL.	
	Examiner	Art Unit	
	Amy T. Lang	1714	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☒ Claim(s) 15 and 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4-27-2006</u> .   | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. Claims 15 and 30 are objected to because of the following informalities: claims 15 and 30 disclose a belt and chain where it is the examiner's position that any belt or chain is currently claimed. The applicant is advised to rephrase the claim so that a belt-, chain-, or disk-type continuously variable transmission is claimed. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the claimed amount of 20 wt% is not disclosed in the specification and it is the examiner's position that the amount is intended to be 2.0

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wt% based on the disclosure previously filed. Therefore, the claim will be further examined with an amount of about 2.0 wt% or more, as cited in the specification.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 10 recites the limitation "the calcium sulfonate" in line 1 of the claim.

However, claim 1, from which claim 10 is dependent, does not specify calcium sulfonate as the claimed detergent. There is insufficient antecedent basis for this limitation in the claim.

7. Claims 5 and 20 recite the limitation "amu" regarding molecular weight of polyisobutylene in line 2 of both claims. However, polyisobutylene refers to a polymer molecule and amu is atomic mass unit which refers to an atom. Clearly, the recitation of amu is confusing and possibly incorrect.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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9. Claims 1-5, 7-8, 13-20, 22-23, and 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Chrisope (US 5,089,156).

US '156 discloses a transmission fluid comprised of born containing dispersants and phosphorus and boron containing dispersants (column 1, lines 58-62). The dispersants further comprise succinimides, specifically polyisobutylene succinimides, where the polyisobutylene has a molecular weight up to 10,000 or a number average molecular weight of 900-1300 (column 7, lines 11-19; column 7, line 62 through column 8, line 2). Although the instant claims measure atomic weight in amu, this measurement is confusing and possibly incorrect in light of which it is the examiner's position that US '156 overlaps the instant claims. Furthermore, the weight percent of the dispersants is disclosed as 2-5 wt%, which clearly overlaps the instant range of 2.0 wt% or more (column 12, lines 40-46).

US '156 also discloses a metal-containing detergent in the transmission fluid, including magnesium phenate, calcium sulfonate, and magnesium sulfonate (column 12, lines 5-10). Further additives are disclosed, specifically corrosion inhibitors, foam inhibitors, pour point depressants, viscosity index improvers, antioxidants and seal performance improvers, which clearly overlap the instant claims (column 10, line 67 through column 11, line 3; column 11, lines 13-14, 40-43; column 12, lines 15-17, 50-62).

The fluid disclosed by US '156 is specifically utilized for manual and automatic transmissions fluid and gear oils, which comprises the instantly claimed shifting clutches (column 13, lines 17-25). Furthermore, the disclosed composition is inherently suitable

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same composition as is instantly claimed. The fluid composition is also comprised of a major amount of base oil, specifically 50 percent by volume or more (column 3, lines 19-28).

In regards to claim 31, while there is no disclosure that the transmission fluid is a continuously variable transmission fluid as presently claimed, applicants attention is drawn to MPEP 2111.02 which states that "if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction". Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the preamble does not state any distinct definition of any of the claimed invention's limitations and further that the purpose or intended use, i.e. continuously variable transmission fluid, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art US '156 and further that the prior art structure which is a transmission fluid is identical to that set forth in the present claims is capable of performing the recited purpose or intended use.

Therefore, Chrisope '156 anticipates the cited present claims.

10. Claims 1, 12, 14-16, 27, 29-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Srinivasan (US 5,578,236).

US '236 discloses a power transmission fluid comprised of phosphorus and boron containing dispersants, boron containing dispersants, and a major amount of base oil (column 1, lines 53-55; column 2, lines 17-19, 61-67). The dispersants are used in amounts of 3.77 wt%, which clearly overlaps the instant range of 2.0% or more (column 14, Table 1, line 56). A detergent is also disclosed, specifically calcium sulfurized phenates with a TBN of 200 mgKOH/gram (column 12, lines 27-36).

The disclosed power transmission is specifically utilized as automatic transmission fluids, especially for new models of automatic transmission fluids which incorporate torque converter clutches that operate in a slip mode (column 2, lines 52-60). Therefore, the composition is suitable for use in a slipping torque converter and shifting clutches. Furthermore, a torque converter that operates in slip mode is equivalent to a continuously variable transmission fluid, including a disk-type CVT. Therefore, by utilizing the fluid composition disclosed by US '236 in a torque converter, it intrinsically improves steel-on-steel friction and anti-shudder characteristics and stabilizes steel-on-paper friction.

Therefore, Srinivasan US '236 anticipates the cited present claims.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 1, 6, 9-12, 14-16, 21, 24-27, 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan (US 2002/0151441 A1).

US '441 discloses an automatic fluid composition comprised of major amount of base oil and phosphorus or boron containing dispersants ([0046]; claim 1, page 10).

However, attention is drawn to where US '441 discloses that in a preferred embodiment the phosphorus containing dispersants are also boronated ([0058]). It therefore would have been obvious to incorporate both the boron containing dispersants and phosphorus and boron containing dispersants in the automatic fluid composition and arrive at the instant claims. US '441 further discloses the amount of dispersant as 3.77 wt% (Table 1, page 9).



In addition to dispersants, US '441 discloses overbased detergents in the composition, specifically calcium sulfonate and calcium phenate with a TBN of 300 and 260 mgKOH/gram respectively ([0041], [0042]). Although US '441 does not disclose the wt% calcium in the detergent, it is the examiner's position that TBN is related to wt% calcium in the compound. US '441 teaches that overbased detergents incorporate a large amount of calcium and superbased detergents have an exceptionally high TBN ([0041], [0043]). Therefore, superbased detergents comprise elevated amounts of wt% calcium so that wt% of calcium and TBN are related. Thus, if calcium sulfonate and calcium phenate overlap the instantly claimed ranges of TBN, they would also overlap the instantly claimed ranges of wt% of calcium.

US '411 discloses the fluid composition as a continuously variable transmission fluid that improves anti-shudder characteristics ([0023], [0025], [0026]). Furthermore, it is also taught as lubricating automatic transmissions with electronically controlled converter clutches whereby the composition would intrinsically increase steel-on-steel friction and stabilize steel-on-steel paper friction ([0003]). Therefore, one of ordinary skill would thereby obtain the invention as set forth in the presently cited claims.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ohtani (US 5,344,579) teaches a phosphorus and boron containing dispersant and a boron containing dispersant in amounts great than 2.0 wt% and a metal containing detergent such as calcium phenates and calcium sulfonates.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy T. Lang whose telephone number is 571-272-9057. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ATZ  
06/01/2006

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